

## **REVIEW OF DEPARTMENT OF FINANCE'S LONG-TERM 2007 POPULATION PROJECTIONS**

This brief reviews the current long term population projections of the Department of Finance (DOF) issued in 2007 relative to DOF's current population estimates as of 2009. As described below, assessment of the projections indicates the projections remain within reasonable bounds. There is a difference of a half a percent between the population estimate and projection for the state as a whole for 2009. In comparing short-term projections as of 2009 with the long-term projections for the period from 2009 to 2020, the maximum annual projected difference is 1.29 percent for 2013, declining toward convergence later in the decade.

The DOF's Demographic Research Unit (DRU) develops long term population projections every 3 to 5 years. A new projection series is prepared following the release of decennial census data and as needed when compared to current estimates. An interim projection is prepared immediately after a census which does not revisit the assumptions, but simply updates for Census results. In July 2007 DOF released its latest projection series for this decade using methodology described in Attachment A.

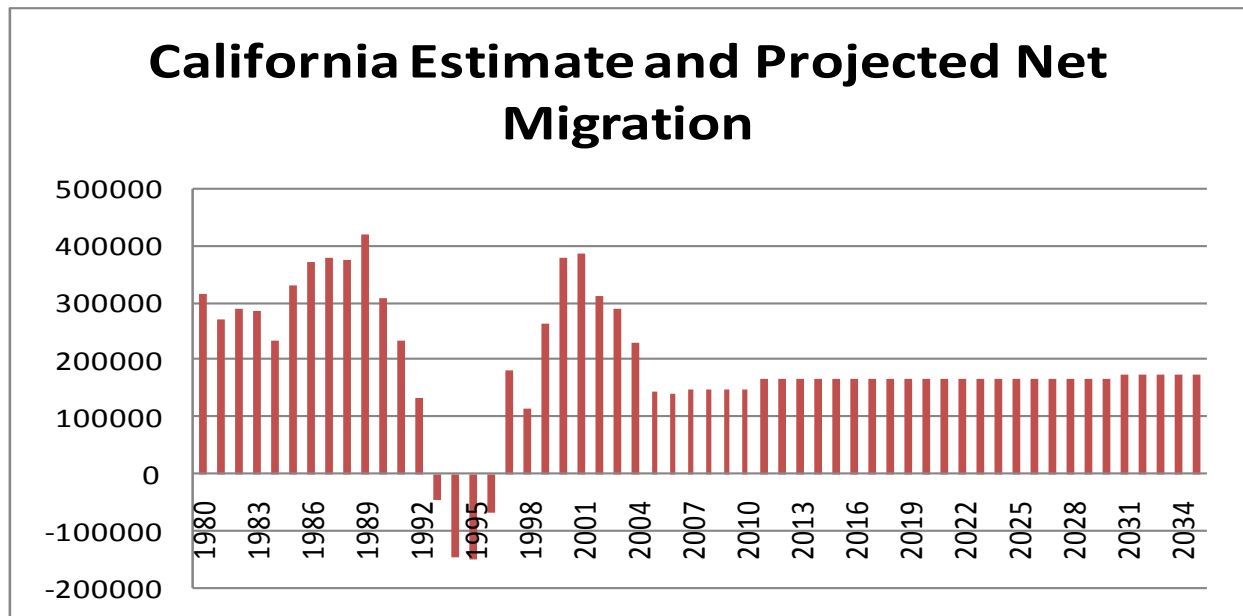
2010 Census results for the state will be released by December 31, 2010 for reapportionment. Sub-state level population counts will be released by April 1, 2011. The DRU plans to release an interim population projection series after California county enumerations become available.

### **Components of California's Population Growth**

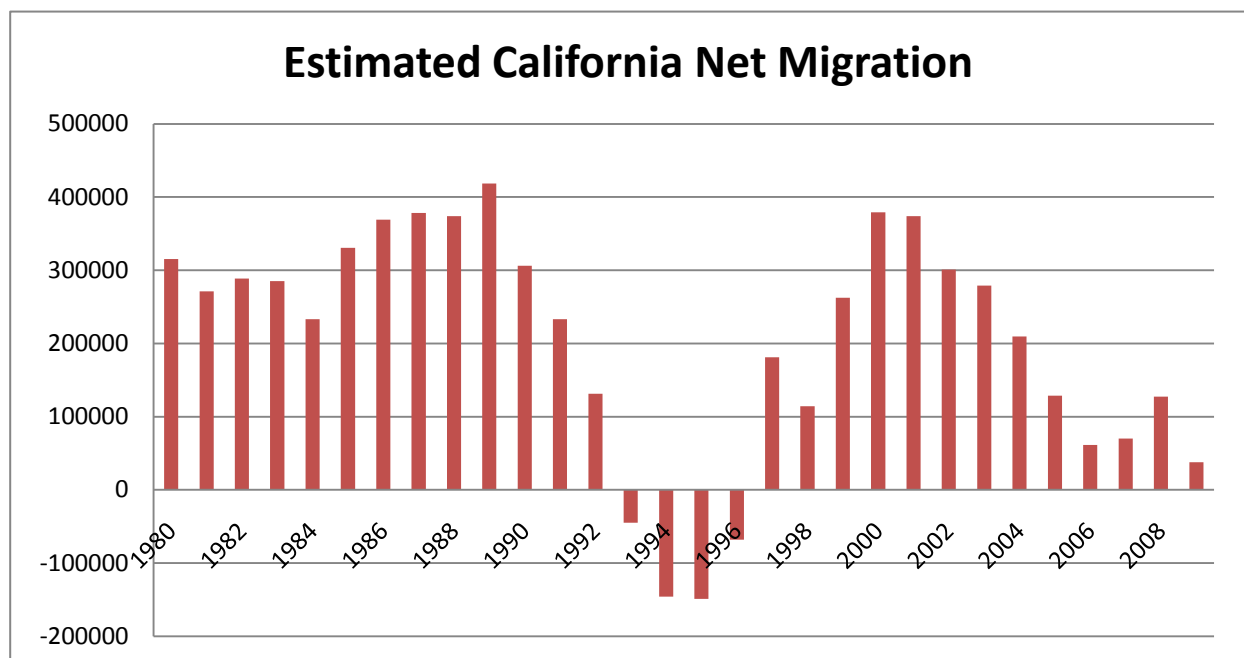
Of the two components of population growth--natural increase (births minus deaths) and net migration--the state's projected growth will be dominated by natural increase. During the 1980s net migration, the sum of foreign and net domestic migration accounted for 54 percent of the state's population change while natural increase accounted for 46 percent of the change. In the 1990s net migration made up only 21 percent of population growth and natural increase accounted for 79 percent of the increase. So far this decade the breakdown has been 38 percent due to net migration and 62 percent due to natural increase. The DOF 2007 population projections forecast that in the future population growth will be driven one-third by net migration and two-thirds by natural increase.

### **Migration Patterns**

Since the population projections were released in July of 2007, the value of homes in California has fallen and the unemployment rate has risen, part of a national recession. Annual net migration to California had averaged nearly 250,000 between 2000 and 2006, but for the past 3 years averages 78,000. A slowdown in net migration was expected and incorporated in development of the 2007 projections.



Net migration assumptions are made in consultation with local planners if possible, and also factors in historical patterns. As the chart above indicates expectations were for slower net migration during the second half of this decade. While the projections incorporated expectations that net migration would pick up after 2010, as migration generally rebounds following recessions, levels of the past are never reached in the projections issued in 2007.



As is evident from the above chart the economic slowdown this decade is not impacting migration to the extent it did during the 1990s. The economic slowdown in the 1990s was centered in California. The current economic slowdown is nationwide so the levels of migration have slowed. Thus, California is not losing as many people to other states as it did in the previous decade. The recession is not expected to inflict long term impact on the State's

population growth. While the State's population is not projected to hit the peak annual growth of over 700,000 reached in the 1980s, average annual growth of nearly 500,000 or 1.3 percent is projected over the next decade, reaching a statewide population of 44,123,000 by 2020.

### **2009 Comparison of Population Estimates With 2007 Population Projections**

When compared to the current population estimates, the 2007 Projections for the State are about 0.5 percent higher on a statewide basis. The biggest difference, just over 4 percent, is in the North San Joaquin Valley area. In three regions, ABAG, SANDAG, and AMBAG, the current estimates are higher than the 2007 Projections.

	Provisional Estimates July 1, 2009	2007 Projections July 1, 2009	Difference	Percent
SCAG	18779188	18985941	-206753	-1.10%
ABAG	7426517	7299488	127029	1.71%
SACOG	2437292	2447356	-10064	-0.41%
SJ VALLEY NORTH	1629503	1699324	-69821	-4.28%
SJ VALLEY SOUTH	2,382,901	2,435,615	-52714	-2.21%
SANDAG	3208466	3169126	39340	1.23%
AMBAG	704769	697194	7575	1.07%
ALL OTHER	4302154	4389864	-87710	-2.04%
California	38487889	38688293	-200404	-0.52%

### **2009 Comparison of Short Term Projections to 2007 Projections: 2009- 2019**

The Department of Finance prepares short-term population projections on a statewide basis twice a year. When comparing those to the long term projections done in 2007 it is interesting to note that the biggest difference (1.29%) is in 2013 and the two projections actually start to converge after that time.

California	November 2009	Baseline Of 2007 Projections 2006			
2009	38487889	38688293	-200404	-0.52%	
2010	38854106	39135676	-281570	-0.72%	
2011	39234299	39609709	-375410	-0.96%	
2012	39617098	40090061	-472963	-1.19%	
2013	40059658	40577880	-518222	-1.29%	
2014	40564336	41072619	-508283	-1.25%	
2015	41078846	41572952	-494106	-1.20%	
2016	41595631	42079010	-483379	-1.16%	
2017	42114320	42589469	-475149	-1.13%	
2018	42634630	43103140	-468510	-1.10%	
2019	43156979	43619054	-462075	-1.07%	
2020	43681450	44135923	-454473	-1.04%	

### ***Comparison of Census Bureau and State of California Population Estimates: July 2008<sup>i</sup>***

The next interim population projections, incorporating the 2010 Census total, will be developed following the Census Bureau's (CB's) sub-state population counts scheduled for release by April 2011. The CB's July 2008 estimate for California is 36,756,666. This is 1,391,827 fewer persons, 3.6 percent less than the State's official estimate of 38,148,493, prepared by the Department of Finance's (DOF's) Demographic Research Unit (DRU). This is an unprecedented level of difference between the population estimates of the CB and California's DOF.<sup>1</sup>

There are offsetting differences in the population components that result in this discrepancy. The most prominent reason for the discrepancy is the estimation of domestic migration (people moving from state to state). Since the 2000 Census, the Census Bureau estimates a net domestic migration loss of 1,378,706 persons (more Californians who moved out-of-state than

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<sup>1</sup> Among other states that develop their own estimates, at least three of them (Florida, Nevada, and New Mexico) report their population estimates are higher than those of the Census Bureau, and believe the difference is attributable to lower net migration assumptions used by the Census Bureau.

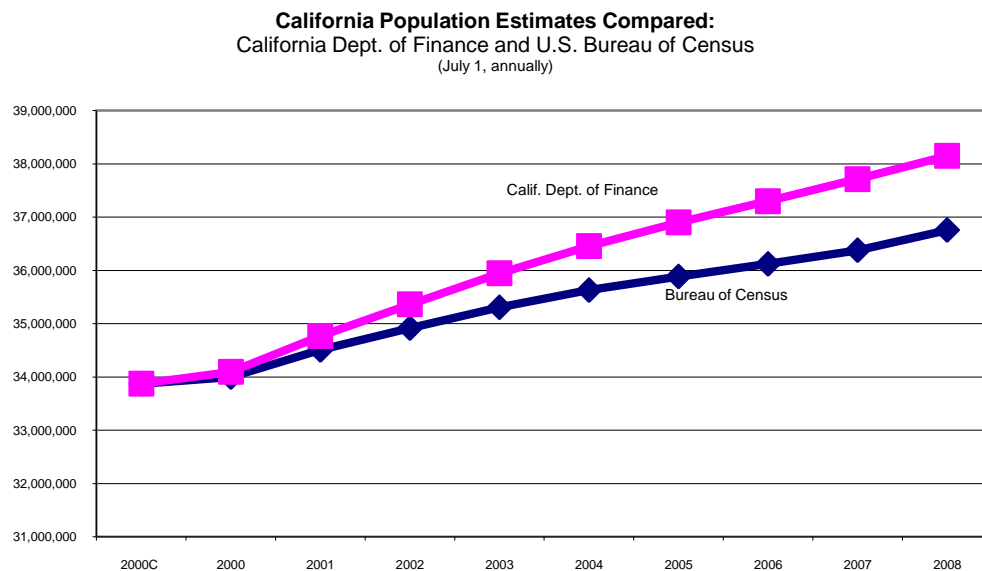
those who moved here from other states). The Census Bureau's method matches address and dependents on federal tax returns for tax filers from one year to the next to measure migration.

During the same period, the DOF estimated a net loss of 83,702 domestic migrants from the state. The DOF's method uses the more timely state-to-state exchange of surrendered driver licenses to strengthen the estimates produced by comparing tax returns alone, and also uses current school enrollments to estimate the population under 18. For the past two decennial censuses (1990 and 2000), the DOF's population estimates have proven to be more accurate than the Census Bureau's.

For the 2008 estimate, 111,000 of the discrepancy was due to the final step in the Census Bureau's estimates process that adjusts individual state estimates to sum to the independently estimated U.S. total population.

The other population change components were estimated by both sources to be nearly identical. Nearly the entire difference is accounted for in the net out-migration component, estimated by the Census Bureau to be significantly larger. Table 1(below) and following graph summarize and demonstrate the increasing divergence of the two estimates, from 2000 through 2008 (the 2000C entry represents January 1; all others are for July 1 of that year).

The graph below displays the widening gap between the two forecasts (note that the population axis begins at 31 million).



The July 2008 California population, as estimated by the DOF is about 3.8% greater than the population estimated by the Census Bureau. The most significant difference in the estimates for individual counties is for Los Angeles County, which is estimated by DOF to have had nearly

half a million (485,388) more residents in July 2008 than estimated by the Census Bureau. Other populous counties with significantly smaller population estimates than those of DOF are San Diego (160,405), Orange (114,997), Santa Clara (82,258) and Alameda (74,124). Of the nine counties that were estimated by the Census Bureau to have populations greater than one million in 2008, three counties were estimated by DOF to have populations at least 4.9% greater than reported by Census Bureau: Los Angeles (4.92% greater), Alameda (5.03% greater) and San Diego (5.34% greater).

Only six counties were estimated by the Census Bureau to have greater populations than estimated by the DOF, the largest difference appearing in Placer County, estimated to have an additional 3,195 estimated residents.

The differences for the regions encompassed by the State's Metropolitan Planning Organizations (MPOs) are shown in Table 2.

**Table 2. CB and DOF Population Estimates  
for Metropolitan Planning Organizations (MPOs)**

MPO	July 2008		Difference	Percent
	CB	DOF		
<b>SCAG</b>	17,950,391	18,648,406	698,015	3.9%
<b>MTC (ABAG)</b>	7,046,719	7,341,707	294,988	4.2%
<b>SACOG</b>	2,275,106	2,315,505	40,399	1.8%
<b>SJ Valley (8 MPOs)*</b>	3,862,937	3,974,821	111,884	2.9%
<b>SANDAG</b>	3,001,072	3,161,477	160,405	5.3%
<b>AMBAG</b>	716,074	754,253	38,179	5.3%
<b>Other MPOs, aggregated</b>	1,071,244	1,102,394	31,150	2.9%
<b>ALL MPOs</b>	<b>35,923,543</b>	<b>37,298,563</b>	<b>1,375,020</b>	<b>3.7%</b>
<b>California</b>	<b>36,756,666</b>	<b>38,148,493</b>	1,391,827	3.8%

## **Attachment A**

### **Methodology Used for Long Term 2007 Population Projections**

#### **Basic Method**

The Department of Finance uses a baseline cohort-component method to project population by age, gender and race/ethnicity. For this projection series, there are seven mutually exclusive race/ethnic groups: Hispanics and non-Hispanic American Indians, Asians, Blacks, Multirace persons, Pacific Islanders and Whites. A baseline projection assumes people have the right to migrate where they choose and no major natural catastrophes or war will befall the state or the nation. A cohort-component method traces people born in a given year through their lives. As each year passes, cohorts change as specified in the mortality and migration assumptions. New cohorts are formed by applying the fertility assumptions to women of childbearing age.

For a detailed methodology: <http://www.dof.ca.gov/research/demographic/reports/projections/p-1/>

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<sup>i</sup> Description by California Departments of Finance (DOF) and Housing and Community Development (HCD), August 2009.